BUSINESS BUDGETING

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ACROSS THE EDITOR'S DESK

Several years ago a different kind of book hit the best seller list like a bombshell. Titled simply "Boners" it contained nothing more than brief excerpts from students' examination papers - hilarious statements that had all America laughing.

At a recent dinner we were seated next to a professor, who teaches various business administration subjects in our local University, and also has a class in the Evening College.

"Do you ever get any 'funny' answers on college papers," I asked, "like the ones in the 'Boners' book?"

"Plenty!" he said. "Perhaps not so hilarious as the honest boners written by elementary students, but humorous enough to brighten up an evening of paper-grading."

In one of his classes in Auditing, he had a student who was an expert in "stalling" - by using a lot of words to disguise the vagueness of his answer. Thinking to catch him off guard, the professor suddenly shot this oral question at him: "Suppose you are the auditor, and you arrive at the office one morning to find the Cashier has absconded with the funds. What is the first thing you would do?"

The student rose to give the answer. "The first thing I would do" he said without hesitating, "would be to credit 'Cash'!"

For a short quiz, the professor listed a number of transactions on the board and required that the students prepare a chart of accounts to serve the accounting purposes of the fictional company. From some of the transactions listed it was apparent that not all the ventures of the firm were profitable, so one young student wisely included in his chart an expense account labeled simply "Experience".

For another quiz the professor had operating statement and balance sheet forms mimeographed; from a record of transactions the students were required to fill in the forms. Unfortunately a typing error was made so that instead of "Net Worth" it came out "Not Worth". As the given transactions indicated the company was going in the wrong direction fast, one student filled in opposite "Not Worth" -- "A Darn".

In a similar quiz, the professor listed the transactions on the board, the students to compute the operating statement therefrom.

Here again the result was obviously on the red side of profitable. One of the transactions listed was "Donations", and one student raised his hand to ask: "That item, there, 'donations'; is that BY or TO this firm?"

His class on "Income Tax Accounting" in Evening College had a large enrollment of men studying the subject primarily for their own personal use. One of the professor's examination questions read like this: "If a man is the sole support of his mother-in-law, may he claim her as an income tax deduction?" And one of the answers went like this: "NO - while the government shares in a man's good fortune by taxing his winnings, it will not share any of his misfortunes".

The first class in any new term, my friend went on to tell me, is invariably attended by some confused freshmen who simply got lost and wound up where they shouldn't have. For one opening term class in Advanced Accounting, the professor took the entire period to outline the course,

COST REDUCTION THROUGH BUDGET CONTROL

By Malcolm K. Sheppard

President, M. K. Sheppard & Company, Cleveland, Ohio

From cost-control at the foreman level to top management summary reports, the "Plan," as outlined by an experienced consulting management engineer, covers the field of budgetary control. And as every good plan should, it provides proof through actual experience.

THE BUDGET PLAN WE use is designed to supply the yardsticks and reports to the foremen and provide the facts for executives and staff members to help the foremen manage their departments and progressively reduce operating cost.

The men responsible for spending most of the money that goes into production cost in a manufacturing plant are the foremen and department heads. If costs are high, it is because these foremen and department heads have spent more money for labor, material and departmental expense than the production or services of their department justified. In most factories, direct workers are fairly well controlled but indirect labor and departmental expense are relegated to "overhead" and more or less left to themselves until the monthly operating statements reveal unabsorbed burden. This is too late for effective control, since it is known weeks after it occurred.

Frequently indirect and service department labor is as large as direct labor and should be controlled just as tightly. Expenses such as supplies, tools, maintenance and scrap are sizable items of production costs.

Responsibility for everyday control of all these expenditures rests with the foremen or department heads. Actually all that any other executive or staff member can do is to assist and guide the foremen to help him accomplish this important task.

BUDGET REPORTS are usually issued daily for the control of labor and weekly for other items of departmental expense. Although called a BUDGET SYSTEM, it is a cost control rather than a forecast system and is built from the bottom up rather than from the top down. By that we mean that predetermined budget standards apply to men at the machines and benches in their daily production and service activities and since they are applied daily to measure the actual tasks performed, properly set they are equitable throughout the full range of product mix and production volumes. Since budget standards are used primarily for cost control, they are changed as frequently as methods, conditions or knowledge of the facts may change. Therefore, the path of progress is continually and freely toward better performance and lower cost.

The PLAN has two primary objectives.

1. To increase the productivity of all workers and thereby reduce operating costs.
2. To improve the management skill of supervisors in better planning of work, elimination of waste of all kinds, increased efficiency and continual improvement of operating methods.

In other words, to increase the value obtained for every dollar spent for direct and indirect labor, tools, supplies, maintenance, utilities and salaries.

The Procedure for installing the BUDGET SYSTEM consists of four steps:

1. The setting of preliminary budget standards for each item of controllable departmental cost.
2. The compilation and issuance of budget reports by responsibility showing actual and budgeted expenditures and variances.
3. The guiding of foremen in performance and method improvement through the use of budget reports.
4. The continual refinement of budget standards through engineering analysis and study until engineered budget standards are evolved.

The development and installation of the program is usually a joint undertaking of a company's engineers and cost accountants in collaboration with individual department heads. This stimulates maximum interest of all participants in all phases of the program through actively developing and applying it. It also trains competent leadership for administering the program after the installation work has been completed.

The installation usually starts with the control of labor in one department after another until all labor in all departments is covered and then each item of manufacturing expense is analyzed and budgeted.

PRELIMINARY BUDGET STANDARDS – (Set from quickly available information)

Preliminary budget standards are established for each type of labor and expense in a department from whatever information is available or readily obtained. Past records, incentive systems, cost reports, accounting records, production and time cards, check time studies and the experience of supervisors are all tapped to develop preliminary standards that reflect the conditions and operations to be controlled. Typical items for which budget standards are set and daily reports issued are:

Operating labor
Set-up labor
Special orders and samples

TOTAL PRODUCTIVE LABOR

Delay time
Break in new help

ACROSS THE EDITOR'S DESK (Cont'd from Page 2)

the topics to be covered, from consolidated balance sheets to C.P.A. review. "Now", he said, "are there any questions?"

"Yes", came a voice from the back of the room, "Isn't that a strange outline for a course in freehand drawing?"

One of our friend's favorite boners, he confided, came from the paper of a student in Budgetary Control. For a cumulative problem, students were required to hand in their worksheets each month, on which he noted errors they were to correct before next turning in the paper. One particular student was pursuing the correct theory, but due to errors in his computations was heading far wide of the correct solution. "Your theory is fine", the professor wrote on the paper, "but your arithmetic is terrible. Didn't you study mathematics in high school?"

Next month he noted that beneath this pointed question, the student had scribbled this direct answer: "Yes, but my teacher told me I never would know math from a hole in the ground!"

Material Handling
Cleaning & Sweeping
General indirect labor
Process inspection
Supervision and clerical
Product repair

TOTAL NON-PRODUCTIVE LABOR

TOTAL CONTROLLED LABOR

Overtime & Night Premium

The following items are budgeted and reported daily or weekly:

SUPPLIES & EXPENSE

Oils and lubricants
Supplies
Grinding wheels & abrasives
Miscellaneous expense
Maintenance-machines
Maintenance-Tools & Jigs
Maintenance-Other
Perishable tools
Scrap material

TOTAL

Wherever possible the budget standards and reports are expressed in quantities or physical units of measure rather than dollars, so that rate or price changes do not complicate the figures. This also permits showing variance due to high wage rates or purchase prices.

BUDGET REPORTS

The preliminary budget standards are used to measure the foreman's effectiveness in controlling all the items of cost for which he is responsible. Budget standards for labor are applied to each day's production and are compared with actual expenditures, item by item on a simple budget report issued the next day. This enables the foremen to note any deviation from his expected performance and to take prompt corrective action. Because each item is separate and measured by itself against its own standard, the correction is fairly obvious. The foreman's time is conserved since he operates on the "Principle of exceptions" and devotes his attention to those deviations of greatest magnitude and ignores the items that approximate the budget.

The detailed reports are for the foreman and comparable levels of management. They are briefed into summary reports for higher levels of management to which are added the budgets for expenditures which are controllable only by top management.

Budget reports are compiled and issued by accounting clerks so that the figures are authenticated by the accounting department and may be used for other accounting needs. This eliminates the duplication of records and eventually permits the integration of the Budget System into the regular Standard Cost Accounting procedure.

PERFORMANCE AND METHODS IMPROVEMENT

The budget reports are issued for one department after another until all departments (Productive, Service, Staff and Administrative) and all items of factory cost have been covered. Intensive training in operation control is given to each line as well as staff supervisor. Regular meetings with the foremen, plant management, industrial engineer and accountant are held to discuss the excess cost revealed by the reports, the corrective action to be taken and the progress to date. The reduction in cost and expense in any department is a problem for the higher levels of management as well as for the foremen and the solution is often a mutual one. Budget reports provide the facts specifically and in detail for each element of cost. They also measure the progress in controlling each element as well as the overall total.

It is the responsibility of company industrial engineers to assist foremen in raising performance by finding and analyzing the reasons for deviations from standard and recommending corrective action. As the installation approaches completion, more engineering time is devoted to analyses and studies of both manual and machine operations for the purpose of improving methods in order to insure the use of better manufacturing practices. Experience has proven that there is no end to the economies to be derived from constant improvement of manufacturing methods, tooling, plant layout and material handling.

ENGINEERED STANDARDS

When all departments are effectively using preliminary standards and budget reports, some departments will have been raised to a high level of performance and will be ready for the first setting of engineered standards which will supersede the preliminary standards. Engineered standards are set through sound industrial engineering & accounting procedures and are based upon best methods on existing equipment. An engineered standard is fair to both employee and employer. It is the amount of work that a skilled worker, properly motivated, can produce when given adequate supervision, training, tools and machines and materials. A properly selected worker can maintain such a standard indefinitely. Engineered standards are kept current at all times by revisions whenever there is a measurable difference in the operation time due to changes in methods, conditions, materials, machines or tools.

Budget standards are also set for the other items of controllable cost through engineering analyses of the source of the expenditure. For example, Budget standards for unavoidable delays are determined by Ratio Delay Studies; cleaning machines, lubrication, material handling, trucking and process inspection are determined by time study; supervision and clerical are budgeted on a fixed and variable basis for varying capacities for the department. Oils, lubricants, supplies, grinding wheels and perishable tools are budgeted through analytical estimates of reasonable need per machine hour of operation derived both from current records and actual physical measure of the proper rates of consumption.

THE BUDGET SUPERVISOR

The budget system is a vehicle by which all members of management can operate as a coordinated team in cutting costs and raising profits by each member contributing his fair share in his own particular bailiwick.

An important factor in the success of the program is the man chosen as the "quarter-back" of the team who acts as budget supervisor. He is a staff member of management understanding production, cost and personnel practices and should report to the top executive. He may be the assistant to the president, the assistant general manager, the controller, or chief industrial engineer but will devote a major portion of his time to the development and operation of the program in its early stages. His job is to coordinate the work of industrial engineers, accountants and operating executives and line supervisors in building an effective program, formulating policies for its operation and carrying on a successful campaign of economy and cost control. It is his job to see that each key man meets his budget or finds out why he cannot meet it and what is to be done to correct the difficulty.

ESSENTIAL FOLLOW THROUGH TO CUT COSTS USING BUDGET CONTROL

How Is This Tool Used To Cut Cost?

What Conditions are Necessary?
What Action is Taken to Make Budget Control Work?

THE FOLLOWING FACTORS HAVE BEEN VITAL IN SUCCESSFUL BUDGET PROGRAMS:

I Organization and Discipline
II Management Training
IIII Stimulation By Management
IV Management Incentive Plans
V Manpower Control
VI Profit Manager
VII Accounting Analysis of Variances

I SOUND ORGANIZATION AND DISCIPLINE:

A clearly functionalized organization with well-defined line of authority and responsibility with proper delegation and control will automatically have the discipline and follow-through to make a successful installation of Budget Control. Discipline should start with the top executives but often it can be inspired by the head of manufacturing or accounting or sales or even engineering.

Discipline is indicated by prompt follow-through of instructions of information to and from each level of the organization. When it is present there is a sure reward and certain transfer for dereliction of duty in any form. Where sound organization and discipline exist in a company, the program we have outlined will work wonders in greater productivity and lower unit cost when competently installed and operated as an integral part of the regular operating and accounting routine.

II MANAGEMENT TRAINING:

a. Leadership training or subordinates and superiors in their respective duties.

The training of each individual in a department or section of a company is a prime function of every supervisor of the company. A budget program is an urgent reason for doing this training. It is a very broad subject which gets into every element of responsibility and it is an ideal subject since it stimulates interest in all of these items and measures improved results.

b. Management Training of selected promotable candidates by top management staff men.

The American economy is expanding continually. To match this expansion, every company needs to expand or it will die on the vine. To make it grow and to keep up with the growth, young executives are a vital necessity and must be trained. Trained junior executives in strategic spots throughout the organization will not only spark and accelerate a Budget program but will be stimulated to greater efforts by it.

c. Supervisory training in effective departmental management. Where no regular training such as the above is going on, Budget program requires one.

Since Budget reports are available showing the relationship between Budget and actual expenditures regular meetings of supervisors and executives should be held. The subject of these meetings is the solution of specific problems. Such as, excess personnel, too much overtime, high cost of supplies, interruption of production waiting for materials, for tools, for machine repair, for instruction, for manpower, high cost or excess usage of tools, excessive maintenance costs, etc.

d. Depending upon the usual habits of the particular company have the meeting with a very few or several supervisors at a time. Ten or twelve people is about the top limit in size for effective discussion. These meetings should be held at least once a week and oftener if feasible.

With these training meetings to actually get and improve the service between departments to demonstrate how services are essential to economical production. For example, the service of maintenance department tool room, purchasing, etc. in serving machining or assembly departments.

Any one of the above training activities requires a strongly effective team in sympathy with the objectives of the program and the authority encouraged to make decisions and to see that they are carried out.

III STIMULATION BY MANAGEMENT:

In order to obtain all significant factual data in each department, it will be necessary to STUDY all the machines in the department, all labor in the department, and all department conditions, including service to the department. In short, it will be necessary to OBSERVE AND RECORD EVERY INEFFICIENT CONDITION.

IV 1. Management Incentive Plan

The works management incentive plan is intended to complement organized programs for each reduction, through incentive payments to works management, in the attainment of the general company objective which is:

"To make and sell quality products competitively, and to perform those functions at the lowest attainable cost consistent with sound management policies, so as to return an adequate profit after taxes for services rendered. "As a corollary objective, the Corporation must be the low-cost producer of the products it offers for sale."

The achievement of this objective is contingent on the optimum utilization of labor, equipment and material.

2. General Description of the Plan

1) The plan is works-wide in scope and is designed to cover all members of works management except the general superintendent and works auditor, and will be based upon cost performance of the works at which they are employed.

2) The plan provides for the creation of a management incentive fund for distribution to the management team when:

a. Current cost performance, as measured by the adjusted standard practice budget, exceeds 97%. For each 1% performance above 97% up to a maximum of 102%, an incentive award of 5% of the total of the participants' base salaries for the current quarter will be included in the incentive fund; and

b. As an additional incentive to reduce standards, an incentive award of 10% of the total of the participants' annual base salaries will be developed and included in the fund for each 1% new reduction in standard practice standards when current performance exceeds 97%.

One company in one year saved an amount equal to its total profit in previous years.

V MANPOWER CONTROL

The only way that labor cost can be controlled is to have the work force proportioned to the work load. No magic can avoid this. Manning Tables are a part of a budget control program. Among many, these 3 types of Manning Tables give excellent results:

1. Manpower budgets based on labor standards for direct labor and fixed and variable budgets for indirect labor for both productive and non-productive departments.

2. Manning table listing of every position on the

payroll showing the proper manning for the volume of the current quarter and for two or three quarters hence. For subsequent quarters the objective is twofold:

a. - Proper manpower for expected volume.

b. - Planned reductions through changed operating practices. A rubber plant with a payroll of 1200 persons maintained a volume of 10,000 tires per day for a 3 year period while reducing its head count from 1700.

3. Direct conversion by arithmetic of labor budget variances (whether man hours or dollars) back to equivalent people to make an easily recognized concept for the department head.
This device is simple, direct, understandable.
Used by any determined executive it can get real results quickly.

A Steel Mill with a payroll of $3 million a month at 75% of capacity dropped to $2 million per month in a period of 4 months.

By this head count expedient the labor variance was cut from $300,000 per month to $35,000 in the 4 month period.

VI A PROFIT MANAGER

Product prices dropped 15% to 24%. Labor and materials costs moved, too, but the wrong way.

Solution: Creation of a new management post - that of profit improvement manager - whose full-time job is to watch for ways to cut costs.

The Man - Back of the new job was the realization that there was nobody on the management team who regularly went down into the plant to watch costs.

Production manager, Fred Horstman, got the new job - at first on a part-time basis, later full time. Horstman, while well down on management totem pole, was chartered to cut across lines of established authority to get his story heard by the proper person or persons without hindrance. He was formally turned loose on the profit improvement job in August, 1954.

Projects - Horstman initiates each cost-cutting project on the foreman-worker level. For example, he talks over material waste with both foreman and worker. The subject of operating efficiency - the ability of the foreman's group to meet standards of performance - he discusses only with the foremen.

He sets his teeth into projects until somebody gets going or gives him a good reason why not. How far he goes before quitting depends on the number of dollars involved or on how deeply he is convinced of the soundness of his arguments. Obviously, a profit manager has to be something of a diplomat.

The most obvious proof of Horstman's efficiency in improving profit is the increased consciousness in everybody up to top management of the possibilities for cutting costs. You can see places all about the plant where Horstman has cut costs that might otherwise have been missed. Probably the biggest advantage of the program is the simple fact that everybody is conscious of Horstman's presence.

The company recognized that most of the savings will not come from Horstman's office; they will be merely started there. The final accomplishment will be by the foremen, engineers and the department heads.

This program needs budget standards and control to measure results from such a procedure.

VII ACCOUNTING ANALYSIS OF VARIANCES AND SPOT CHECK OF UNUSUAL CONDITIONS.

"Controllers responsibility is to assist other officers of the company by analyzing and checking their policies and activities as revealed by accounting records".

A budget system should be an integral part of the accounting records. Therefore accounting performs its duties and services by:

1. Analyzing and checking accounting records to reveal poor policies and practices.

2. Assisting all members of management by analyzing policies and activities of the company.

3. Making analyses without necessity for further investigation of what happened.

4. Reaching conclusions in terms of effect on profit.

5. Comparing one future course of action versus another.

6. Approaching accomplishment through the principle of control by exception. Accounting records should be looked upon by accounting employees as controls of the business rather than as merely a job to be done. They carry out management's budget objectives, and they are salesmen in the sense of stimulating others to action by preparing attention-getting presentations of cost information. A vastly different and more responsible job as business men is required from accounting as well as engineering sales and operating personnel.

WHY THE PLAN WORKS

The reasons why the PLAN is successful where other plans have failed, are these:

1. It begins at the bottom and builds up rather than down from the top. It starts at the bench, machine or man and measures effectiveness there first and then combines these basic elements in their true proportion and as they actually occur in production. Excess cost shown in top management summary reports can be readily traced to its original cause. Any control system in which this is not true, will eventually fail.

2. It deals in terms the foremen understands, in man hours, machine hours, pieces and pounds which are unaffected by price or wage rate changes. A knowledge of accounting by the foreman is not essential to the success of the plan. But a recognition of how each expenditure proportionately adds to department cost is fundamental. It is practiced continually until fully appreciated by each department head.

3. The reports are frequent and therefore current and deal with facts and conditions that are easily remembered by the foreman. On items that are controllable daily, such as labor, both direct and indirect, the reports are issued daily. Other items are reported weekly and monthly. Summary reports in dollars are issued monthly soon after the end of each month.

4. In effect each department head is in business for himself, with performance or profit goals set specifically for this department. In turn, he sees his department performance compared with that of other departments and combined with them to make the overall performance and

(Continued on page 12)

RETAIL PLANNING AND EXPENSE CONTROL

By: Jack L. Selkowitz
Budget Director, Macy's, New York

This may come as a mild shock to executives of manufacturing firms – but Department Stores use budgets, too. Furthermore, they have been doing so for a good deal longer than many other types of business. Here, Macy's not only tells Gimbel's but all the rest of us as well.

The functions of the retail business enterprise generally includes such operations as receiving and distributing merchandise, providing and maintaining services, making employment available, maintaining sound labor relations, and among other things, keeping the stockholder happy. There is one basic principle, however, which is inherent in all business enterprise. It must remain alive and vigorous, it must have a growth potential and it must continuously replenish itself. Theoretically, it may seem possible for a business enterprise to stand still but actually business seldom survives if it does not grow. Business may succeed in attaining growth through fortunate economic circumstances but moreso, it is the result of sound business leadership. Good management is dependent on well organized business planning; that is, looking ahead and planning not only for the immediate future, but for an extended period of time. This kind of planning inevitably involves the forecasting or budgeting technique. It is important for Management to know its past accomplishments but it is much more important to know where the Company is going, its ultimate goal and the influence of important indices and trends.

In the department store field, the larger stores have been more cognizant of the necessity of business planning and forecasting than most of the smaller stores. This statement should not be interpreted in the sense that large stores are in a better position, financially, to provide such services because actually, in my opinion, they are not. Too many small business enterprises throughout the country have been absorbed by larger ones because they did not exercise foresight in planning for the future and did not acquire the growth potential which is so necessary today for survival. Planning for growth means that one must constantly strive for intelligent and efficient operation leading toward lower costs and higher profits. The department store, small and large, is generally a low profit business compared to other industry, averaging 2% to 4% net profit after taxes. Because of this low profit margin, the need for planning and expense control is extremely important if department stores are to continue to give and maintain the many customer services which are so essential to their operation and growth.

BIG STORES LEAD THE WAY

The development of budgeting techniques has been going on for many years in the department store field but the smaller stores have been lagging and must catch up on this relatively newer science if they are to survive. Harvard Business School publications tell us that in the period 1936 to 1940, the expense percent to sales in department stores with sales of $10,000,000 or less was 35.4% as compared to 36.7% in stores of over $10,000,000 of sales. The stores under $10,000,000 had an expense percent of 1.3 percentage points lower than the larger stores. In 1953, the same comparison shows a differential in expense percent of only 0.6 percentage points. We know that, generally speaking, large stores should have a higher expense percent compared to smaller stores because of such items as warehousing, high delivery cost, personal shopping, mail and telephone service, etc., which are usually non-existent in small stores. Yet despite this relative disadvantage, the large stores as a whole are gradually narrowing the gap in expense. It means that large stores will continue to give these extra services at relatively small additional cost, and yet derive the benefits of additional gross margin and profit because of high sales volume. In the department store of which I am a member, the forecasting and planning of sales volume and expense has been maintained and developed for a period of over 20 years. The development of budgeting techniques started initially with the salesclerk operation then expanded into the sales supporting activities and finally into non-payroll expenses.

While this was going on, various methods of forecasting sales volume and gross margin were experimented with until we gradually developed a system which is unique in this field. Forecasting of sales volume and gross income, or gross margin as it is generally referred to, is performed both at the control level and by the various Department Managers of selling departments. Individual departments are planned by the selling Department Manager and the overall store plans by the Controller's Division. The two plans are then reconciled into one operating plan for the store. Comparisons of sales performance are made against this operating plan for the store as a whole and by general merchandising groups. In addition the store's sales performance is judged on its weekly and cumulative relationship with the other stores of the district reporting to the Federal Reserve Board. On a departmental basis 'share of the market' indices are maintained. 'Share of the Market' serves as a yardstick for the store in determining the overall progress made by buyers in improving the growth potential of their departments and is probably one of the most important measurements used in rating the effectiveness of the Buyer on his job.

BUDGET DIRECTOR'S RESPONSIBILITY

The responsibility for the budgeting and forecasting of expenses is under the supervision of the Budget Director, who is also the Department Manager of Expense Control. I think it would be worthwhile to give you a brief outline of the activities performed by our Expense Control Department.

a. Preparation for the approval of the Board of Operations and the Store Executive Committee of the annual and seasonal profit forecast. These forecasts are used as overall merchandising and operating plans. This entails preparation of payroll and non-payroll budgets which are then coordinated with volume and gross margin plans.

b. Preparation of monthly operating personnel budgets. This is performed with the cooperation of buyers, floor management and non-selling department managers and assistants. At these meetings, the buyer, selling floor representative or non-selling department manager, in conjunction with the budget analyst set monthly plans of sales, transactions and personnel coverage. In the case of non-selling departments, work load and cost measurements appropriate to each operation are used.

c. Preparation of Maintenance and Capital Expenditure Budget. This report gives an analysis of Capital Expenditures for the previous years, projects planned and approved for the current year and a three year projected plan which embodies the thinking of top management for

store expansion, improvement of store appearance, replacement of machines and equipment, etc. A report analysing the results of capital expenditures in relation to the original plans is prepared periodically.

d. Maintenance of expense and budgetary records, policing of the budgets and assistance in operations by such means as labor scheduling, flexibility, employment priorities and studies of expense performance.

The technical assistance given to all our executives is handled by the small organization whose general functions were outlined above. Briefly its personnel consists of the Budget Director and a General Assistant who also has responsibility for the budgeting of non-selling operations. The balance of the organization consists of:

a. A budget analyst responsible for budgeting of salesclerks.

b. A budget analyst who covers the non-salary expense items.

c. An administrative assistant who supervises the clericals in the office and compilation of expense performance reports.

The most important area in any retail store, in terms of customer contact, is the selling floor. It therefore becomes extremely important to the store to maintain adequate personnel coverage so that the best possible service may be given to the customer during all hours of store opening. In this respect we are not only talking about getting the required man power in terms of number of people, but the scheduling of this manpower by day of the week, by hour of the day and the determination as to the proper ratio of full and part time employment to meet the peaks and valleys of customer traffic are all factors which enter into the service picture. This is not a simple job. Approximately 40% of our personnel in the parent store, are devoted to selling the customer and in our branch store this figure is considerably higher. So that in a large store of about 12,000 employees, approximately 5,000 are salesclerks. Now there are 150-200 selling departments with different sales volume, average check, transactions productivity per hour, space requirements, etc. The problem of proper allocation of manpower to fit the needs of each department and at the same time creating a balanced store is one which we do not expect the operating executive on the selling floor to perfom without assistance. Take the operating executive away from customer service on the selling floor and the store loses through poor service and lack of contact with customers. This is what we want to avoid and we believe that by supplying the technical planning assistance to management their time away from their immediate responsibilities is minimized.

BUDGET PLANNING STEPS

The Budget Planning for each selling department briefly takes in the following steps:

a. Planning sales volume

b. transactions

c. average check

d. productivity per man hour

e. number of labor hours required

f. scheduling of department in terms of full time and part time employment.

g. selling cost

I want to get some time in about our sales supporting activities. This is a large segment of the store and takes in such important functions as the Receiving and Marking of merchandise, Wrapping and Packing, Mail and Telephone departments, Publicity, Controller's Division, Warehouses, etc. These non-selling operations comprise roughly 60% of the store personnel and an important factor in the expense picture. This is the area which generally requires more rigid expense control than the selling area. It is more vulnerable when expense reduction becomes necessary and this is as it should be. The non-selling areas of the store with its large percentage of the store's population, the tremendous space it occupies, and the great mass of systems and procedures which flow through its arteries are subject to continuous surveillance for expense reduction through improved techniques, improved methods and procedures, mechanization, incentive plans, modernization of equipment and layout and for more modern methods of training personnel. It is only through such devices and means that department stores can hope to keep their expense down in the face of the continuous upward trend of labor cost.

Each non-selling operation is budgeted as a separate department or expense center. The budget analyst, responsible for planning of non-selling operations, has had wide experience and training in many areas of the store. Equipped with knowledge of store operations plus an economic and statistical background makes him a valuable aid to the operating executive around the conference table. In the non-selling areas, the primary job is to establish the number of labor hours for each center which when computed into expense dollars and summarized will tie-in with the overall expense goal. The analyst first establishes the work load or production unit factor. He reviews his quarterly and monthly trends and correlates this data with such additional information as advertising expenditures, special events and on the job information supplied by the operating executive.

After the work load is established the rate of production by these units to be turned out is established. The production per hour goal is the key to the expense forecast because any watering down of this figure may produce a labor requirement which will not be consistent with efficient operation. In other words, an operation which is overloaded with too many people, another having too few people, will produce the unbalanced picture I mentioned before and will lead to inefficiency and high cost. It is therefore extremely important that sufficient time and discussion be taken to establish this production per hour goal properly - one which considers the overall store goal and at the same time the problems of the executive on the job.

Once the forecast of work load and production per hour is agreed upon, the division of one by the other will give the number of labor hours required to perform the work load planned. The number of hours is then multiplied by the expected salary rate per hour and the dollar forecast is arrived at. In arriving at the salary rate per hour the analyst considers overtime premium pay, holiday pay and expected labor turnover.

Approximately 150 selling departments and almost 100 non-selling expense centers are keyed to production unit planning. The consolidation of all this individual data will produce a payroll forecast correlated to a given sales volume and transactions and related units in the non-selling areas. All the planning information is recorded on similar budget sheets. Alongside the plan, the actual performance is recorded so that comparisons may be made against the plan. Each operating executive

maintains a copy of his budget performance and is always in a position to review his own accomplishments and what is expected of him.

In the composition of a large department store expense structure about 60% constitutes payroll expense and about 40% non-payroll expense. It therefore becomes equally important to control as closely as possible this so-called non-payroll expense. 40% of our total expense is a large sum of money, but unfortunately a fair percentage of this sum is in a fixed or semi-fixed category with very little one can do about them. Such expenses as rent, real estate taxes, depreciation, certain types of insurance, heat, light and power costs are long-range considerations and are therefore not flexible for adjustment on the daily or weekly basis. However, a good share of this 40% is definitely tied-in with volume of business and must be closely planned and controlled. Delivery expense, for example, is a large expense item in a store of our size and according to the Harvard analysis of department store operations, runs as high as 3% of sales. Apply this 3% to any given volume and you have a considerable expense item to deal with. One which stores are constantly striving to reduce by limiting the size and amount of sent orders, by making more attractive packages for customers to carry and trying to educate customers to carry small packages with them. A store with a ratio of sent transactions to total transactions of 20% need only reduce this by 1 percentage point to effect a 5% reduction in delivery cost.

Space is not permitting me to be more complete, particularly in describing the function of initiating and processing of capital and maintenance expenditures. I do want to say that requests for capital expenditures are initiated by the department managers concerned and relayed to our Board of Operations for approval via the Expense Control Department. These requests are carefully screened, and the larger the amount the more attention it receives all the way up the line. Consideration is given to its effect on cash resources, depreciation and any influence it may have on the current expense action.

What I have just reviewed with you gives the inside picture of how the budget planning job functions. Our budgets are variable budgets and are adjusted to changes in volume, work load and other factors which may have not been considered at the time the plans were originated although we try to keep such contingencies at a minimum. We plan our goals one year ahead of time and break the year down into two seasons, Spring and Fall. The seasons are then divided into monthly and weekly forecasts. These forecasts are reviewed each month by the budget analyst and the operating executives in charge. Any deviations from the original forecasts both upwards and downwards are submitted in the form of a budget amendment and if approved becomes the revised or adjusted forecast. Obviously we strive for flexibility and before any request for additional funds are made we will look around for expense savings to offset such requests.

I know that you will agree that a budget is a valuable tool of management and the details required to give you the most effective results should be worked out in relation to the needs of your own store. I feel sure that those who have set up budget procedures with the thought of using it as a means of control and coordination will agree that it is the primary machine leading to increased profits. This is our selling point and the efforts of N.S.B.B. are constantly being directed toward this end.

BUDGETING EXPENDABLE MATERIAL

By P. C. Ronayne

Plant Analyst, International Harvester Co., Louisville, Ky.

In case the terms "Fixed" and "Variable" haven't been doing alright, just change 'em to "Predictable" and "Unpredictable", throw in "Historical" for good measure, and watch yourself go!

Webster's definition of expendable is, "To consume by use in any way". In this discussion, expendable is applied to that portion of manufacturing overhead expense that provides materials and supplies consumed in performing manufacturing functions. Included are materials for repair and maintenance of plant machinery and equipment, machine tools, and replacement of cutting tools, abrasives, supplies and fuel. Expendable materials are also referred to as Indirect Materials, Overhead Materials, Burden Materials, etc.

It has been the practice at many concerns to gauge practically all such expenditures on an historical percent factor, related to the volume of Direct or Prime Labor developed. This method of measuring is coming under scrutiny due to automation. As this cycle toward automation continues, we must be prepared by having established other means to budget and gauge expendable materials.

To facilitate, let us divide the problem into two sections, namely:

No. 1 Repairs and Maintenance Items

No. 2 Replacement Items

Regarding Section No. 1, Repairs and Maintenance of the plant, machinery and equipment, machine tools, office equipment, etc., we believe this category of expense should be handled as follows:

1. Subdivide into predictable, unpredictable and historical.

   a. Predictable to include major periodic expense that can be forecasted and planned in advance for repair and maintenance of machine tools, heavy machinery, conveyors, railroad trackage, roads, lawns, fencing, roofing, etc.

   b. Unpredictable to include major emergency repairs to machine tools and heavy machinery caused by mechanical or human failure.

   c. Historical to include all day to day operating expense not included in predictable and unpredictable categories.

It is believed that the above breakdown will be more readily understood than the often used alternates of variable, semi-variable, and fixed because these definitions frequently reverse themselves when used -- the variables become fixed and the fixed become variables. For example, the fixed portion of automobile expense -- depreciation, taxes, insurance, etc., -- becomes variable per mile of operation, while the variable portion, -- gasoline and oil, -- becomes fixed per mile of operation.

Concerning 1-a above, the budget can be determined from estimates furnished by the Plant and Mechanical Engineers and other department heads.

Concerning 1-b above, the budget can be determined from past experiences and the best judgement of the responsible department heads.

Concerning 1-c above, the budget can be determined

by relating it directly to volume of production required, based on one of a number of factors such as: gross sales dollar value or weight; gross shipping dollar value or weight; gross production dollar value or weight; direct or prime labor (when practicable) - In practice this category is based on historical experience of day to day routine expense, and can be further subdivided as desired.

Regarding Section No. 2, replacement of cutting tools, abrasives, supplies and fuel, we believe this category of expense offers the greatest opportunity for improved budgeting. Most concerns have used past history related to forecasted production activity as their basis for budgeting replacement expense. There are exceptions where standards per unit of production have been established and are used, such as coal for power house operation; however, these exceptions usually account for a minor portion of replacement expense.

In this connection we have found that standards per production unit can be determined for cutting tools and abrasives. This action would result in placing approximately 60% of replacement expense in the predictable category, leaving approximately 40% in the historical category.

At this point I wish to acknowledge that the establishment of standard costs per production unit for cutting tools and abrasives have been under development for years by many progressive department heads in the performance of their duties. In many instances the problem simply involves collating the information for use in budgeting. Where standards have not been established, the studies to determine them creates cost saving possibilities in addition to improved budgets.

Specifically, in regard to the establishment of standards for cutting tools and abrasives, the Mechanical Engineer and the Production Superintendents have recognized for years that if bogies setting the maximum number of pieces to be processed per tool sharpening are established and controlled, substantial savings in tool cost, scrap, rework and machine maintenance would be realized. By bogies, we mean that whenever a new or properly resharpened cutting tool, drill, tap, reamer, gear hobber, milling cutter head, etc., is put into use, there is a determinable number of pieces that can be processed with the tool before resharpening, and still maintain quality and obtain maximum service life from the tool.

Constant violation of bogie limits often results in irrepairable damage to tools and equipment. Science states the axiom under "Hooks Law" which tells us in essence, that whenever a material is stressed beyond its elastic limit, the material no longer returns to its original state, but changes both dimensionally and structurally. This means that maximum tool life will be obtained when the cutting tool is removed from its application and reground before it becomes damaged by pressures caused by operating when dull. This practice will also indirectly help control Section No. lb as fewer machine and equipment failures will occur.

Therefore, once it is agreed that bogies or standard number of pieces per tool grind can and should be established it becomes a simple arithmetic calculation to determine cutting tool standard costs per product piece.

(Cost per cutting tool) + (Pcs. per grind x grinds per tool) =
Cutting tool standard cost per production piece.

By completing this calculation for each cutting tool and abrasive application for every piece scheduled through a department it is possible to arrive at standard costs per piece which can then be converted to budgets for any schedule mix. In actual practice an adjustment factor over standard should be allowed for expense to replace a portion of broken or defective tools, human failures, etc.

As a matter of interest this procedure resulted in a 50% reduction in cutting tool cost in the first department to which it was applied. This savings was effected because the General Foreman helped set the standards and recognized the excessive cost of sub-standard tool life. The machine operators cooperated in establishing the number of pieces per tool sharpening, as longer tool life means fewer interruptions and higher earnings to the individual pieceworker.

Scrap and rework will decrease when proper tool bogies are maintained and quality standards will improve immeasurably.

Specifically, we are advocating the establishment of standard costs per unit for expendable or indirect materials wherever practicable, similar to standard costs for direct material and direct labor. It can be done.

The remaining portion of Section No. 2 falls into the historical category and would be budgeted in a manner similar to Section No. 1-c.

The foregoing approach to budgeting Expendable Materials is presented for whatever assistance it may be to those interested in the problem and to solicit other ideas on the subject.

LETTERS TO THE EDITOR

Editor,
"Business Budgeting":

In the February issue of "Business Budgeting," Technical Notes Magazine, an error was made in listing the price of my bulletin "PROFIT AND LOSS BUDGETING." The correct price is $1.15 not $1.65.

I will appreciate your running a correction in an early issue of "Business Budgeting," because to date I have received several orders enclosing the larger amount and we have no convenient means of making refunds. Until a correction is made, we are asking interested persons to send us a second check for the correct amount.

Thank you for listing the bulletin and for anything you can do to correct the information concerning the cost of the book.

Yours sincerely,
W. D. Knight
Director, Bureau of Business Research
University of Wisconsin.

Editor
"Business Budgeting"

As the N.S.B.B. fiscal year draws to a close, I would like to join the many others who have praised so highly the splendid work you have done on "Business Budgeting". Certainly the April issue is outstanding and represents one more step forward in your aggressive program.

(Signed) J. M. Shackelford
Johns-Manville Corp.
New York, N.Y.

Gee - thanks! – Ed.

WHO SHOULD INSTALL THE BUDGET?

An "inside" job – or one for the experts? Here are two opinions, based upon experience. If you have another opinion, let's hear from you.

A couple of months ago we asked "Is installing the budget an inside job," and invited comments of our readers. Several very interesting communications were received, from which two have been selected as representing the typical (and majority) opinion that ... well, read and see for yourself.

"YES" – says Charlie Eckelkamp, Combustion Engineering Inc., New York, N.Y.

Based on my own experience and assuming that the company has at least one person qualified to head the budget program my answer is "yes".

A budget executive should have either an accounting or industrial engineering background or both. In addition to being capable of analyzing, interpreting and coordinating facts and figures, he must be cognizant of human relations, capable of understanding the viewpoints of people, and able to establish proper lines of communication between the various departments and the budget staff. He must also be capable of 1) selling the principles of budgeting and keeping them sold, and 2) instructing others, and therefore must possess some of the qualifications of a salesman and a teacher.

It is also assumed that the employee selected has been sufficiently exposed to the major policies and practices of the company, a general understanding of the overall operations and familiarity with all of its products.

It is not essential that he have prior experience in developing, installing and operating a budgetary plan but must have a thorough knowledge of the principles and the ability to organize and program work.

An employee with these qualifications starts the program with a full head of steam. The outsider must start from scratch and first educate himself to the company's operations, etc., and get acquainted with the members of the management team. Except for members of the Controller's department, who must face up to the outside auditors annually, most employees are not accustomed to being subjected to such an exhaustive examination of how, when and why they operate their departments in the manner they do.

An insider can fraternize, if need be, with his fellow employees, and in other ways break down barriers that the professional outsider could not employ without destroying or impairing his professional standing.

"PARTLY," says Visch Millar, Pennsylvania Salt Manufacturing Co., Philadelphia.

Page 2 of the February issue of "Business Budgeting" poses the old problem of whether or not to install a budget "from the inside". My guess is that you will probably not find any one answer to this problem. However, NSBB might be interested in Pennsalt's experience:

The budget program as an overall element of Management has been developed entirely from the inside. However, the largest and most intricate portion of the job – the development and installation of Standard Costs – was done with outside help. A consulting firm was called in and with their advise a Standard Costs Team was appointed from Pennsalt's own employees. This team and the professional people started with the first plant, a small one. The professional people did the work and the Pennsalt team watched. The whole crew then moved on to the second plant; this time the Pennsalt people did the work and the professional people watched. From then on through each of the other plants and classifications the professional firm stood by to answer otherwise unsolveable problems but took no active part.

For reasons that are obvious this seemed to be the very happy solution to the question you pose.

ABOUT OUR AUTHORS

Mr. Sheppard, president of M. K. Sheppard & Company, consulting management engineers, formerly was a partner of the firm of Robert Heller & Associates of Cleveland and for several years a staff member of Ernst & Ernst. A mechanical engineer from M.I.T., he has devoted many years in close collaboration with the accounting profession in developing and applying the principles of budgetary control and responsibility cost accounting to the operations of such companies as Duplan Silk Corporation; Carnegie-Illinois Steel Corporation; Continental Can Company; Thompson Products, Inc.; Overhead Door Corporation; The Goodyear Tire & Rubber Company; Towmotor Corporation and Eaton Manufacturing Company.

Mr. Selkowitz is Budget Director and Secretary of the Board of Operations and Expense Control for Macy's and its branch stores in New York. Mr. Selkowitz is a public accountant and an Insurance and Management consultant. He attended Townsend Harris Hall and New York University. He is Past National Publicity Chairman for N.S.B.B. and currently a member of the Program Committee of the New York Chapter. Mr. Selkowitz is a member of the American Institute of Management and a member of the National Panel of Arbitrators of the American Arbitration Association.

In the March issue of "Business Budgeting" the "About Our Authors" data was crowded out, for lack of space. With apologies for the delay, here are a few things we'd like you to know about the men who prepared the articles for that issue.

About Frederick Janssen, Division Controller, Bausch & Lomb Optical Co., Philadelphia, who wrote "How to Live With a Fixed Budget":

Mr. Janssen is Controller of the Northeastern Division of Bausch & Lomb Optical Company, at Philadelphia, Pa. He is a graduate of New York University, and a C.P.A. of New York. He is a member of the Controllers' Institute, N.A.C.A., A.I.A., and prior to his present affiliation, was connected for many years with Price, Waterhouse and Company of New York.

About Roy Willison, Comptroller, National Malleable & Steel Castings Co., Cleveland, author of "Financial Planning and Control For a Foundry":

Roy Willison is Comptroller at National Malleable & Steel Castings Company, Cleveland, Ohio. He joined the company in 1937 and has worked his way up through the organization. He was appointed Assistant Comptroller in 1951 and became Comptroller in March, 1954. He is a member of the National Association of Cost Accountants and of the Cleveland Chapter of the National Society for Business Budgeting. The article is an adaptation of a talk he gave to the Conestoga Foundrymen's Association, Lancaster, Pennsylvania in November, 1954.

(Continued on page 12)

and abrasive application for every piece scheduled through a department it is possible to arrive at standard

be to those interested in the problem and to solicit other ideas on the subject.

COST REDUCTION THROUGH BUDGET CONTROL

(Cont'd from Page 6)

profits of his plant or company as a whole.

5. This Budget Control is a self contained and effective cost control program that enables operating executives to accomplish, without disturbing the regular accounting routine, the worthwhile objectives costwise and profitwise that Standard Cost and Forecast Budget systems are expected to do but often fail to bring about. While the compilation of figures is and should be done by the accounting department, the whole program is built for operating people. From a manufacturing department standpoint, the PLAN completely satisfies the control requirements of the production organization, but it can be and usually is combined with a Standard Cost and Forecast Budget System to roundout a completely integrated operating and financial control program.

6. Since the labor budget standards are not used for wage incentive-purposes, management has complete freedom of action in modifying, revising and improving the yardsticks as new ideas and methods are devised. The structure is flexible enough to change frequently yet measure performance and progress with practical accuracy.

7. Where it harmonizes with company policy, and management believes financial rewards to supervision would be beneficial, the PLAN provides an ideal foundation for the payment of Supervisory or Keyman Incentive Bonuses. The larger steel companies and one of the two largest can companies have used such a plan for years with outstanding success.

ABOUT OUR AUTHORS

(Cont'd from Page 11)

About Horace G. Hill, Jr., Senior Associate, Joel Dean Associates, Philadelphia, author of "Management of Capital Expenditures":

Mr. Hill received his B.S. in Mechanical Engineering at the University of Pennsylvania in 1909. His business experience outline is as follows:

1909 to 1911 - Engineering Instructor at U. of Pa.
1911 to 1912 - Plant Engineer, Barrett Mfg. Co.
1912 to 1917 - Plant Engineer, National Lead Co.
1917 to 1918 - Plant Engineer, Allied Chemical

In 1918 he went to work at The Atlantic Refining Co. He was made Budget Director in 1928, which position he held until his retirement January 1, 1954. Since his retirement from Atlantic, he has been associated with Joel Dean Associates, Inc., Yonkers, New York, (Management Consultants) Economic and Management Counsel. Mr. Hill was the first President of the Philadelphia Chapter of the National Society for Business Budgeting – 1951-1952. Also, he served as National Director of National Society for Business Budgeting. He wrote the publication "A New Method of Computing Rate of Return on Capital Expenditures".

BUDGETING BIBLIOGRAPHY

Looking for some good books and articles on the subject of Budgeting? Here is our first offering of "Budgeting Bibliography". Help keep it alive by sending in the titles of good reference material you have read.

Many readers of "Business Budgeting" have given the editor the suggestion that publication of a bibliography of material on the subject of Budgeting would be a welcomed innovation. To do so requires only one thing – a bibliography to publish. All N.S.B.B. members are therefore asked to forward titles of material on the subject, so that this column can become a regular feature.

This month we publish a bibliography through the courtesy of Mel Aichholz, Budget Director and Controller, Bavarian Brewing Co., Covington Ky., and president-elect of the Cincinnati Chapter, N.S.B.B. This bibliography was compiled for use in connection with the Chapter's series of discussions based on the A.M.A.'s budgeting seminar.

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